

Crosslinguistic priming of syntactic and information structure in bilingual development: Evidence from Polish-English bilingual children

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Abstract

A key issue in the study of bilingual language development concerns the nature of syntactic representations in children's two languages – specifically, the extent to which they are shared cross-linguistically. Structural priming evidence suggests that proficient second language learners can rely on shared syntactic structures [1] and that information structure can be primed across languages [2, 3]. Results with bilingual children are mixed: some show significant crosslinguistic syntactic priming effects in one [4] or both directions [5], others found priming for some structures but not others in the same group of children [6]. Whether bilingual children are sensitive to the priming of information structure instead of or alongside syntactic structure is not yet known.

In this study we investigated the priming of syntactic and information structure in Polish-English bilingual children living in the UK. We tested whether children were primed to produce a passive in English by a passive in Polish, and vice versa (syntactic priming), and a passive in English by an OVS prime in Polish, or an OVS structure in Polish by a passive in English (information structure priming). 48 bilinguals took part in this bidirectional structural priming experiment (25 girls; Mage: 9;5, range: 7;11–11;4), across two sessions of a Snap! game with 48 prime-target items (Figure 1) a week apart. After Polish primes, children produced more passives in English than in the baseline phase ($Z_s > 3$, $p_s \leq .001$) and after hearing passive and OVS primes than after hearing active primes ($Z = 2.75$, $p = .006$); passive and OVS primes did not differ in effect ($Z = 0.85$, $p = .39$). After English primes, children produced more passives in Polish than in the baseline phase ($Z_s = 1.9$, $p_s \leq .05$) but there was no difference in the effect of active compared to passive primes ($Z = 0.06$, $p = .95$); they did not produce any OVS.

We observed small (~2%) crosslinguistic priming effects, both syntactic and information structure priming, from Polish to English. However, priming was not bidirectional: English primes did not elicit more Polish passives. We are now testing whether children have single-language representations for these structures using within-language priming and whether adults show crosslinguistic syntactic and information structure priming effects.

References:

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Figure 1. Example snap game picture and corresponding English and Polish primes



Active prime: Policjant czyści pistolet/ The policeman cleans the gun.

Passive prime: Pistolet jest czyszczony przez policjanta/ The gun is cleaned by the policeman.

OVS prime: Pistolet czyści policjant (The gun_[O] cleans the policeman_[S]).